

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

50-755

CHEMISTRY REVIEW(S)

DIVISION OF ANTI-INFECTIVE DRUG PRODUCTS
Review of Chemistry, Manufacturing, and Controls

NDA #: 50-755 **CHEM.REVIEW #:** 2 **REVIEW DATE:** 28-SEP-2000

<u>SUBMISSION/TYPE</u>	<u>DOCUMENT DATE</u>	<u>CDER DATE</u>	<u>ASSIGNED DATE</u>
ORIGINAL	31-OCT-97	31-OCT-97	6-NOV-97
AMENDMENT (EA Exclusion)	18-NOV-97	19-NOV-97	21-NOV-97
AMENDMENT (Facility change)	30-MAR-98	31-MAR-98	31-MAR-98
AMENDMENT (Label Comments)	2-JUL-98	6-JUL-98	13-JUL-98
AMENDMENT (Amendment)	02-OCT-98	05-OCT-98	16-OCT-98
RESUBMISSION (50-755az)	05-APR-00	06-APR-00	13-APR-00
AMENDMENT (50-755BC Formulation change)	08-AUG-00	09-AUG-00	09-AUG-00
AMENDMENT (50-755BC New Stability)	24-AUG-00	25-AUG-00	01-SEP-00
AMENDMENT (50-755BC New Stability)	06-SEP-00	07-SEP-00	07-SEP-00
AMENDMENT (50-755BC Stability Amendment)	13-SEP-00	14-SEP-00	14-SEP-00

NAME & ADDRESS OF APPLICANT: SMITHKLINE BEECHAM
PHARMACEUTICALS
One Franklin Plaza P.O. Box 7929
Philadelphia,
PA 19101-7929

DRUG PRODUCT NAME

Proprietary:

Nonproprietary/USAN:

Code Names/'#s:

Chemical Type/

Therapeutic Class:

Augmentin ES™ Oral Suspension
Amoxicillin/Clavulanate Potassium
For Oral suspension

3 S

ANDA Suitability Petition/DESI/Patent Status:

N/A [if applicable]

PHARMACOLOGICAL CATEGORY/INDICATION: Anti-infective

DOSAGE FORM:

STRENGTHS:

powder for oral suspension
600/42.9 mg per 5 mL

ROUTE OF ADMINISTRATION:

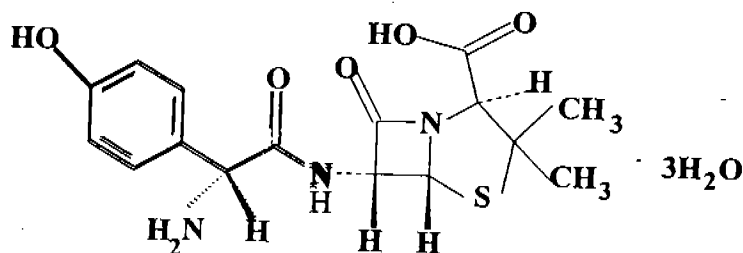
oral

DISPENSED:

☒ Rx ☐ OTC

CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOL.WT:

Amoxicillin Trihydrate $C_{15}H_{19}N_3O_5S \cdot 3H_2O$
(2S,5R,6R)-6-[(R)-(-)-2-amino-2-(p-hydroxyphenyl)acetamido]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0] heptane-2-carboxylic acid trihydrate.
CAS-61-336-70-7
M.W. 419.46



Clavulanate Potassium $C_8H_8KNO_5$

Potassium (Z)-(2R,5R)-3-(2-hydroxyethylidene)-7-oxo-4-oxa-1-azabicyclo[3.2.0]-heptane-2-carboxylate
CAS 61177-45-5
M.W. 237.25

SUPPORTING DOCUMENTS:

Review #1 dated 7/23/98

Amoxicillin trihydrate drug substance

Clavulanate potassium

No DMF authorization needed, the DMF's are held by the sponsor.

RELATED DOCUMENTS (if applicable)

USP 23 Page 100

USP 23 Page 102

Other related Augmentin NDAs

NDA 50-726 - chewable tablet, 200mg and 400 mg

NDA 50-564 - tablet, 250mg and 500 mg

NDA 50-575 - Oral Suspension, 125 mg/5 mL and 250 mg/5 mL

NDA 50-725 - Oral Suspension, 200 mg/5 mL and 400 mg/5 mL

For HDPE bottles, No DMF authorization need, the DMFs are held by the sponsor.

Other DMFs:

The firm has provided DMF authorization letters.

REMARKS/COMMENTS:

In addition to the 4 facilities listed, _____ was added through an amendment on 30-MAR-98. All five facilities were approved based on either profile or actual inspection.

CONSULTS:

A consult was sent to OPDRA, and the nomenclature was found to be acceptable.

REMARKS/COMMENTS :

This review addressed the CMC deficiencies sent by facsimile transmission on March 4, 1999 to SB in Chemistry Review #1, dated 3/26/99. Deficiencies in the original in the resubmission are all resolved. A modified formulation without the raspberry flavored was proposed and then withdrawn on 8/24/00.

CONCLUSIONS & RECOMMENDATIONS:

Recommend approval from the manufacturing and controls standpoint. All pending issues have been satisfactory resolved. All manufacturing facilities are currently in acceptable GMP compliance.

/S/
Andrew Yu, Review Chemist

cc: Orig. NDA 50-755
HFD-520
HFD-520/DivDir/GChikami
HFD-520/Chem/AYu
HFD-520/MO/MMakhene
HFD-520/MAlbuerne
HFD-520/Pharm/ROsterberg
HFD-520/Micro/SAltaire
HFD-520/CSO/SSusmita
R/D Init by: HFD-520/TmLdrChem/ DKatague

/S/ 9/23/06

18 page(s) have been
removed because it
contains trade secret
and/or confidential
information that is not
disclosable.

25-SEP-2000

FDA CDER EES
ESTABLISHMENT EVALUATION REQUEST
SUMMARY REPORT

Page 1 of

Application: NDA 50755/000
Stamp: 31-OCT-1997 Regulatory Due: 06-OCT-2000 Priority: 3S
Action Goal: 31-AUG-1998
Org Code: 520
District Goal: 01-JUL-1998

Applicant: SKB PHARMS
1 FR ANKLIN PLAZA
PHILADELPHIA, PA 191017929

Brand Name: AUGMENTIN(AMOXICILLIN/CI
VULAN
ATE POTASS

Established Name:
Generic Name: AMOXICILLIN/CLAVULA
NATE
POTASSIUM

Dosage Form: FOS (FOR ORAL
SUSPENSION)

Strength: 600 MG/5ML

FDA Contacts: A. YU (HFD-520) 301-827-2143 , Review Chemist
D. KATAGUE (HFD-520) 301-827-2174 , Team
Leader

Overall Recommendation:
ACCEPTABLE on 15-MAY-2000 by M. GARCIA (HFD-322) 301-594-0095
ACCEPTABLE on 21-APR-1998 by J. D AMBROGIO (HFD-324) 301-827-0062

Establishment: 9611207 DMF No:
BEECHAM PHARMACEUTICALS PTE LTDA AADA
No:

Profile: CSN OAI Status: NONE
Last Milestone: OC RECOMMENDATION
Milestone Date: 09-MAY-2000
Decision: ACCEPTABLE
Reason: BASED ON PROFILE

Responsibilities: _____

Establishment: _____ DMF No:
_____ AADA No:

Profile: CTL OAI Status: NONE

Responsibilities: FINISHED DOSAGE RELEASE
TESTER

NDA 50-755
SmithKline Beecham

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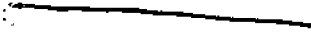

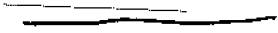
Last Milestone: OC RECOMMENDATION
Milestone Date: 09-MAY-2000
Decision: ACCEPTABLE
Reason: BASED ON PROFILE

Establishment: 9610449
SMITHKLINE BEECHAM
CHEMICALS
AYRSHIRE,
SCOTLAND,
IRVINE, UK

DMF No:
AADA No: 050725

Profile: CFN OAI Status: NONE

Last Milestone: OC RECOMMENDATION

Responsibilities: 





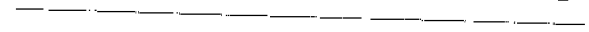
Milestone Date: 12-MAY-2000
Decision: ACCEPTABLE
Reason: DISTRICT RECOMMENDATION

Establishment: 1047293
SMITHKLINE BEECHAM
PHARMACEUTI
201 INDUSTRIAL DR
BRISTOL, TN 37620

DMF No:
AADA No:

Profile: LIQ OAI Status: NONE
Last Milestone: OC RECOMMENDATION
Milestone Date: 09-MAY-2000
Decision: ACCEPTABLE
Reason: BASED ON FILE REVIEW

Establishment: 9610412
SMITHKLINE BEECHAM
PHARMACEUTI

Responsibilities: 



DMF No:
AADA No:

WORTHING, WEST SUSSEX, , UK

Profile: CSN OAI Status: NONE
Last Milestone: OC RECOMMENDATION
Milestone Date: 09-MAY-2000
Decision: ACCEPTABLE
Reason: BASED ON PROFILE

Responsibilities: 